

SYSTROPUS COLUMBIANUS (DIPTERA: BOMBYLLIDAE) REARED FROM LARVA OF LIMACODID MOTH^{1,2}

Annette Aiello³

ABSTRACT: *Systropus columbianus* (Bombyliidae: Systropinae), was reared from a limacodid larva (Lepidoptera) in Panama.

Members of the bombyliid subfamily Systropinae are elongate flies resembling sphecoid and vespoid wasps. With few exceptions all reared species are parasitoids, as larvae, on caterpillars of Limacodidae (Lepidoptera) (du Merle 1975). An additional instance of a systropine parasitoid of a limacodid caterpillar is reported here.

Systropus columbianus (Karsch) (Figure 1), the biology of which previously was unknown, was reared from the larva of an unidentified limacodid (Figure 2) collected 20 July 1978 on Contractor's Hill near the Miraflores Locks, Panama Canal by Ms. Nili Boren. The host, which fed on *Gustavia superba* (H.B.K.) Berg (Lecythidaceae), was dark greenish brown and had a dark green dorsal abdominal "saddle" bordered by yellow. Its large tubercles were covered with red-brown setae.

The caterpillar molted on 25 July, and again on 5 August. On 14 August (middle rainy season) it constructed a cocoon. Eight months later, on 26 March 1979 (end of dry season), the pharate adult fly pushed open the cap at the end of the limacodid cocoon and emerged part way from it. The adult fly then left its pupal skin.

No moth pupa was ever formed; the fly larva killed and consumed most of the final instar caterpillar. The fly egg or larva must either have been dormant or relatively inactive within the caterpillar through at least two molts, or was contacted by the host on its food plant at some later time. An adult female fly could not have reached the caterpillar after its collection: it was immediately placed in a screened cage in a Ziploc[®] plastic bag, kept in an air-conditioned room.

The reference number for all the parts, cast skin, final instar remains, and cocoon of the limacodid, plus larval skin, pupal skin, and adult bombyliid is Aiello lot 78-93.

¹Received December 12, 1979

²This work was done at the facilities of Smithsonian Tropical Research Institute, P.O. Box 2072, Balboa, Panama

³Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, U.S.A. 02138

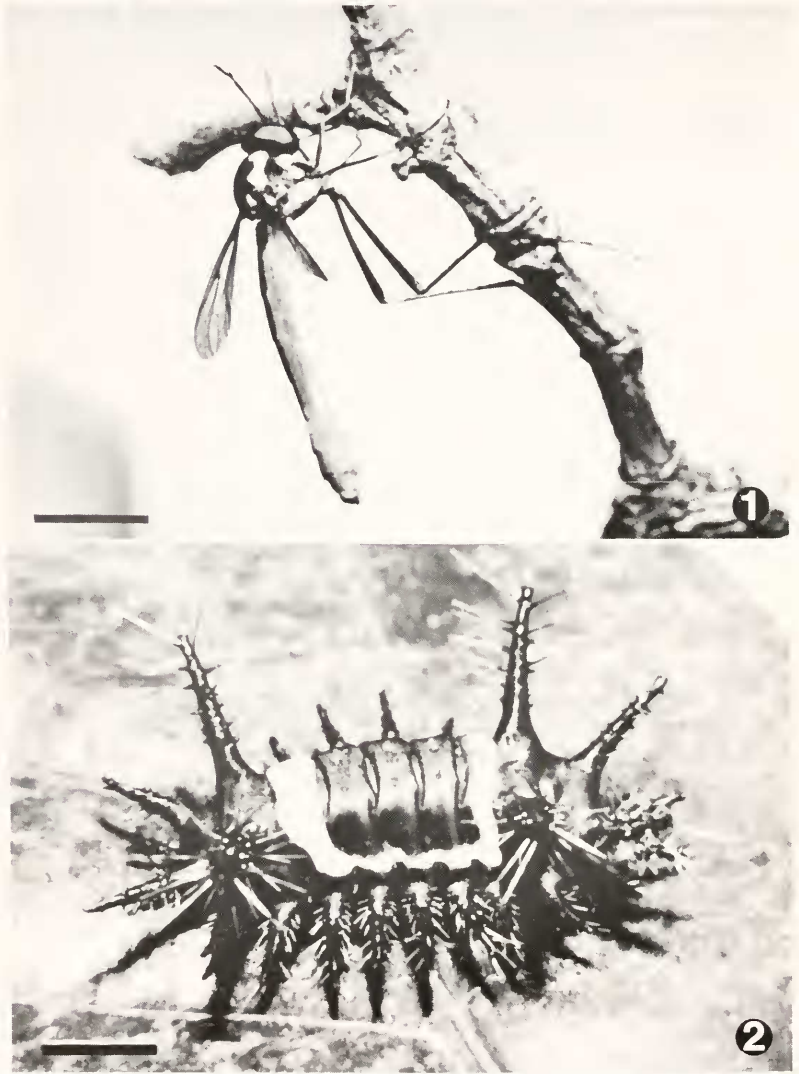


Figure 1. *Systropus columbianus*, adult soon after eclosion. Bar scale = 6 mm.

Figure 2. Host (Limacodidae) of *Systropus columbianus*. Bar scale = 5 mm.

Caterpillars identical in appearance, although feeding on *Quasia amara* L. (Simaroubaceae), were collected on Barro Colorado Island, Panama by Dr. Robin Foster on 27 April 1979. The reference number for this second rearing, two larvae in ethanol, and two adult moths, their pupal skins and cocoons, is Aiello lot 79-31. As of November 1979, nothing had emerged from three additional cocoons from this same lot.

All specimens mentioned above have been deposited in the Museum of Comparative Zoology, Harvard University.

ACKNOWLEDGEMENT

I would like to thank Lloyd Knutson for identification of the fly and for help with literature on *Systropus*.

LITERATURE CITED

- du Merle, P. 1975. Les hôtes et les stades pré-imaginaux des diptères Bombyliidae: revue bibliographique annotée. Bulletin West Palearctic Regional Section, International Organization for Biological Control 1975/4 (289 pp.).

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

c/o British Museum (Natural History), Cromwell Road, London, SW7 5BD, United Kingdom.

A.N. (S.) 112

25th February, 1980.

The Commission hereby gives six months' notice of the possible use of its plenary powers in the following cases, published in *Bull. Zool. Nom.* Volume 36, part 4, on 18th February 1980, and would welcome comments and advice on them from interested zoologists. Correspondence should be addressed to the Secretary at the above address, if possible within six months of the date of publication of this notice.

- 1237 *Carabus caerulescens* Linnaeus, 1758, *C. cupreus* Linnaeus, 1758, and *Cicindela rupestris* Linnaeus, 1767 (Insecta, Coleoptera): designation of type specimens.
2219 *Ceutorhynchus* Germar, 1824 and *Rhinoncus* Schönherr, 1826 (Insecta, Coleoptera): proposed conservation and designation of type species.
2294 *Belloia* Peckham & Peckham, 1892 (Araneae): proposed designation of type species.

R.V. Melville,
Secretary.